

Analytical and Theoretical Perspectives on Green Human Resource Management: A Simplified Underpinning

A. Anton Arulrajah¹, H. H. D. N. P. Opatha²

¹Department of Management, Faculty of Commerce and Management, Eastern University, Sri Lanka

²Department of HRM, Faculty of Management Studies and Commerce, University of Sri Jayewardenepura, Sri Lanka

Correspondence: Anthonypillai Anton Arulrajah, Department of Management, Faculty of Commerce and Management, Eastern University, Sri Lanka. E-mail: aantonarulrajah@yahoo.com

Received: October 13, 2016

Accepted: November 10, 2016

Online Published: November 23, 2016

doi:10.5539/ibr.v9n12p153

URL: <http://dx.doi.org/10.5539/ibr.v9n12p153>

Abstract

This review paper creates strong analytical and theoretical frameworks for green human resource management (GHRM) literature. As green HRM is an emerging field of study it requires strong analytical and theoretical frameworks to underpin the valuable knowledge obtained by the scholars through systematic research works in this field. A review of the literature shows that strong analytical and theoretical frameworks for green HRM have yet to be emerged. Accordingly, the objective of this paper is to fill this knowledge gap considerably. This paper organizes the existing literature on the bases of 'Analytical HRM Framework' of Boxall, Purcell, & Wright (2007) and other relevant organisational theories. Ultimately this paper establishes a strong link between existing literature in green HRM and organizational theories.

Keywords: analytical perspective, green, human resource management, theoretical perspective

1. Introduction

Human resource management (HRM) is a vital field of studies and a well-recognized practice of high value. HRM is the efficient and effective utilization of employees in order to achieve goals of the organization; and it is about managing people at work, being the human side of Business Administration having policies, procedures, rules, and systems influencing employees of the organization (Opatha, 2009). In the human resource management field, there is a growing research literature on green human resource management. However, this emerging literature on green HRM is relatively diverse and piecemeal (Renwick, Redman, & Maguire, 2013; Jackson, Renwick, Jabbour, & Camen, 2011). The literature on green HRM is not only the diverse and piecemeal but also it does not have strong analytical and theoretical frameworks to underpin the valuable knowledge obtained by the scholars through systematic research works in this field except few. Renwick et al.(2013) also suggest that green HRM has considerable potential as a management research area, but that scholarly research is rather lagging behind the practice.

This paper has considered above considerations in deciding its objective. Hence, the objective of this review paper is to establish analytical and theoretical frameworks to underpin the valuable knowledge obtained by the scholars through systematic research works in green HRM.

We begin with a discussion on the methodology adopted and then we present an overview on green HRM as well as the analytical and theoretical framework used to organize the review. Next, we mapped green HRM literature under the analytical framework and corresponding theories. Last, we discuss the issues arising from our review process and offer some general conclusions about our review.

2. Methodology

In order to achieve the objective of this review the archival method was adopted by the researchers. Similar approach was used by researchers in this field (e.g: Jabbour & Santos, 2008; Renwick, Redman, & Maguire, 2008 & 2013). The specific nature and objective of this review necessarily make us to follow the archival method. This review process covers the published research articles and papers in green HRM within the period of 1994 to 2015. In order to provide a better analytical framework for this review, we have used 'analytical HRM' framework of Boxall et al. (2007). Similarly, in order to provide a sound theoretical framework for this review,

we have used system theory (open system model) (Bertalanffy, 1950), institutional theory (DiMaggio & Powell, 1983; Scott, 1987), stakeholder theory (Freeman, 1984), resource based theory (Wernerfelt, 1984; Barney, 1986a & 1986b), process theory (Whitehead, 1933; Russell, 1961; Mohr, 1982) and ability-motivation-opportunity (AMO) theory (Appelbaum, Bailey, Berg, & Kalleberg, 2000).

3. Overview on Green HRM

In order to highlight the major knowledge advancements in green HRM research. First of all, this paper summarizes key conceptual themes of the field. They include meaning of green HRM, Process Model of green HRM, Outcomes of green HRM, and Stakeholders and Performance of green HRM. These key themes are evolved throughout the process of knowledge creation in green HRM and also going to shape the green HRM research domain in the future.

4. Meaning of Green HRM

There are few scholars defined the meaning of green HRM in the existing literature. According to Renwick et al. (2008), the integration of Corporate Environmental Management into Human Resource Management is termed as green HRM. These scholars broadly specified that distinguished policies in the field of recruitment, performance management and appraisal, training and development, employment relations and pay and reward are considered powerful tools for aligning employees with an organization's environmental strategy. In 2013, these scholars again very shortly defined green HRM as the HRM aspects of environmental management.

According to Jabbour, Santos, & Nagano (2010), the 'greening' of functional dimensions of human resource management such as job description and analysis, recruitment, selection, training, performance appraisal and rewards is defined as green HRM. In 2011, Jabbour again defined green HRM as 'the level of greening of human resource management practices' in terms of functional and competitive dimensions of HRM.

These definitions do not have significant differences or contradictions with each other. Therefore, based on the meaning of these definitions, we propose our own definition for green HRM in this juncture. Green HRM can be defined as 'the environmental (green) orientation of all human resource management (HRM) functions or practices of an organization at all levels'. The green HRM deals with rethinking the basic concepts of HRM, its objectives, functions, processes, activities, and strategies in an environmentally friendly manner in order to accommodate the needs of ecological sustainability. Green HRM refers to the policies, practices and systems that make employees of the organization green for the benefit of the individual, society, natural environment, and the business (Opatha & Arulrajah, 2014).

5. Needs for Green HRM

Organisations need green HRM for several reasons. According to the existing literature, there are many reasons. They are listed below with respective author(s).

- To protect the ecological aspects or environment (ecological lessons: e.g.: global warming, climate change, energy crisis, etc.) and to make work meaningful and the workplace safe/healthy within and outside the organisations (Shrivastava, 1994).
- To educate, train and motivate (financially or non-financially) employees to conduct their activities in an environmentally responsible manner (Shrivastava, 1995).
- To provide environmentally friendly products and operations (companies face increasing pressures for eco-friendly products and operations), to manage corporate environmental programs in successful manner (without failure) and to overcome implementation challenges of corporate environmental programs (Milliman & Clair, 1996).
- To support the success of environmental activities of the companies (Wehrmeyer, 1996).
- To provide proactive corporate environmental management because employees are one of the major forces in proactive corporate environmental management and to train, recognize, reward and motivate employees in proactive corporate environmental management (Berry & Rondinelli, 1998).
- To achieve sustainability (achieving sustainability will require not only attention to the technical aspects of systems but also the HR factor) and to succeed (avoid failure) in corporate environmental management efforts (Daily & Huang, 2001).
- To innovate eco-friendly aspects such as products and behaviour (employee eco-innovation) (Ramus, 2002).
- To increase or improve corporate environmental performance (Govindarajulu & Daily, 2004).

- To increase or improve corporate environmental performance by certain HR functions such as training, employee empowerment, and Environmental Management System (EMS) rewards (Daily, Bishop, & Steiner, 2007).
- To become green employer (Phillips, 2007; Stringer, 2009).
- To develop sustainable organizations (Jabbour & Santos, 2008).
- To contribute to implement all the stages of environmental management system (ISO 14001) in the companies (Jabbour et al., 2010).
- To implement Cleaner Production in the organisations in a successful manner (Cleaner Production is unrealistic without the support of human resources) (Neto & Jabbour, 2010).
- To sustain corporate environmental performance or to ensure sustainable environmental performance in a long term basis (Jabbour, 2011).
- To motivate employees, to become involved (employees) in corporate environmental management activities and to develop green abilities and provide employees with opportunities to be involved in corporate environmental management initiatives and efforts (Renwick et al., 2008 & 2013).
- To create, enhance and retain greening within each employee of the organization so that he or she gives a maximum individual contribution on each of the four roles, i.e., preservationist, conservationist, non-polluter, and maker (Opatha & Arulrajah, 2014).

The above mentioned reasons necessitate that organisations do engaged in practicing green HRM. Green HRM makes employees of the organization green so that they reduce or eliminate wastes and then reduce overall costs of the organization. Also they tend to innovate environmentally friendly goods or services. Thus the organization will be able to gain improvements in productivity, talent acquisition, employee retention, reputation, customer loyalty, and market expansion resulting in enhancing organizational competitiveness. Organisations cannot practice green HRM without a system or processes. In practicing green HRM in an organisation, HRM functions provide appropriate mechanism and processes. Therefore, organisations need a functional or process model of green HRM.

6. Process Model of Green HRM

In general, organisations commenced to practice green HRM practices before 1980s. However, most of scholarly works were initiated after 1990s in HRM. Renwick et al. (2008) proposed a process model for green HRM with a set of green HRM practices under the five functions or activities of HRM such as recruitment, performance management and appraisal, training and development, employee relations, and pay, reward and exit. They classified the literature in a process model format of HRM by using collected publications from 1988 to 2008. Many scholars have contributed to this process model formation (e.g: Anthony, 1993; Barrett & Murphy, 1996; Bird, 1996; Brio, Fernandez, & Junquera, 2007; Daily & Huang 2001; Fernandez, Junquera, & Ordiz, 2003; Govindarajulu & Daily, 2004; Phillips, 2007; Ramus, 2001; Ramus & Steger, 2000; Wehrmeyer, 1996; Wolters, Bouman, & Peeters, 1995; Jabbour, Santos, & Nagano, 2008).

7. Outcomes of Green HRM

Practicing green HRM in an organisation will produce many outcomes. Green HRM has various outcomes at various levels. It directly influences the workforce of the organisation and tries to develop an environment-friendly culture within the organisation. The outcomes of green HRM can appear in different forms. It may be employee related outcomes such as environment-friendly workforce, employee with environmental related knowledge, skills, and attitudes or it may be the financial gains such as cost saving or waste reductions. Ultimately it may contribute to firm's environmental performance and image or goodwill as well as legal and standard or system compliance. The existing literature on green HRM has evidence for all these outcomes.

Effective and successful environmental management requires decisive contributions from human resource management of an organisation or HRM functions can decisively contribute to successful environmental management in an organisation (Daily & Huang, 2001; Rothenberg, 2003; Govindarajulu & Daily, 2004; Muster & Schrader, 2011).

Jabbour and Santos (2008) stated that the development of cleaner technologies requires human resource management to perform an active role. Being aware of the environmental strategy of a company, it has to provide the competencies needed for the continuous improvement of the environmental performance.

For our review purpose we termed all these positive gains of green HRM as 'outcomes of green HRM' but it

may be at different levels such as individual employee level, team level, department level, management level, overall organisational level and national or international level. The following Table 1 shows reasons for green HRM, outcomes of green HRM, and different levels.

Table 1. Reasons for Green HRM and its Outcomes at Different Levels

	Reasons for Green HRM (Why)	Outcomes of Green HRM	Levels
1	To protect the ecological aspects of environment (Ecological lessons e.g. global warming, climate change, energy crisis, etc.) (Shrivastava, 1994).	Environmental Protection	Organisational or National or International
2	To make work meaningful and the workplace safe/healthy within and outside the organisations (Shrivastava, 1994).	Workplace Health and Safety	Organisational
3	To educate, train and motivate (financially or non-financially) employees to conduct their activities in an environmentally responsible manner (Shrivastava, 1995)	Environmentally Educated, Trained, and Motivated workforce	Employee/workforce
4	To provide environmentally friendly products and operations (companies face increasing pressures for eco-friendly products and operations) (Milliman & Clair, 1996).	Environmentally friendly products and operations	Organisational
5	To manage corporate environmental programs in successful manner (without failure) (Milliman & Clair, 1996).	Success in corporate environmental programs	Organisational
6	To overcome implementation challenges of corporate environmental programs (Milliman & Clair, 1996).	Success in implementing corporate environmental programs	Organisational
7	To support the success of environmental activities of the companies (Wehrmeyer, 1996).	Supportive workforce for environmental activities	Employee/workforce
8	To provide proactive corporate environmental management because employees are one of the major forces in proactive corporate environmental management (Berry & Rondinelli, 1998)	Proactive corporate environmental management	Organisational
9	To train, recognize, reward and motivate employees in proactive corporate environmental management (Berry & Rondinelli, 1998).	Environmentally Trained, Recognized, Rewarded and Motivated workforce	Employee/workforce
10	To achieve sustainability (achieving sustainability will require not only attention to the technical aspects of systems but also the HR factor) (Daily & Huang, 2001).	Sustainability through HR	Organisational
11	To succeed (avoid failure) in corporate environmental management (EM) efforts (Daily & Huang, 2001)	Successful corporate EM efforts	Organisational
12	To innovate eco-friendly aspects such as products or behaviour (employee eco-innovation) (Ramus, 2002).	Eco-innovation in terms of products and behaviour	Organisational and Employee/workforce
13	To increase or improve corporate environmental performance (Govindarajulu & Daily, 2004).	Environmental performance	Organisational
14	To increase or improve corporate environmental performance by certain HR functions such as training, employee empowerment, and EMS rewards (Daily et al., 2007).	Environmental performance	Organisational
15	To become green employer (Phillips, 2007).	Green employer	Organisational
16	To develop sustainable organizations (Jabbour & Santos, 2008)	Sustainable organization	Organisational
17	To become green employer (Stringer, 2009).	Green employer	Organisational
18	To contribute to implement all the stages of environmental management systems (EMS-ISO 14001) in the companies (Jabbouret al., 2010).	Success of EMS	Organisational
19	To implement Cleaner Production in the organisations in a successful manner (Cleaner Production is unrealistic without the support of human resources) (Neto & Jabbour, 2010).	Successful implementation of Cleaner Production	Organisational
20	To sustain corporate environmental performance or to ensure sustainable environmental performance in a long term basis (Jabbour, 2011).	Sustainable environmental performance	Organisational
21	To motivate employees (Renwick et al., 2013).	Environmentally motivated workforce	Employee/workforce
22	To become involved (employees) in corporate environmental management activities (Renwick et al., 2013).	Employee involvement in Environmental Management	Employee/workforce
23	To develop green abilities and provide employees with opportunities to be involved in corporate environmental management initiatives and efforts (Renwick et al., 2013).	Green abilities	Employee/workforce
24	To create, enhance and retain greening within each employee of the organization so that he or she gives a maximum individual contribution on each of the four roles, i.e., preservationist, conservationist, non-polluter, and maker (Opatha & Arulrajah, 2014)	Green employee roles	Employee

8. Stakeholders and Performance of Green HRM

Until now, there is a lack of direct literature on stakeholders of green HRM and performance of green HRM. Four major stakeholders: employer, employee, customer and supplier are responsible for green HRM. In order to earn profits the employer does production of certain goods or services which more likely damage, waste and use the natural environment. In order to receive various financial and non-financial rewards the employee engages in performance of a particular job which more likely damages, wastes, and uses the natural environment. Indeed mainly the employer, who invested his or her capital to produce a product, is responsible for all resultant damages done to, wastes added to, and uses of the nature or natural environment. Then managers and non-managers are responsible for damages, wastes, and uses in respect of the nature or natural environment. Employees are human beings and when they become green seriously they will significantly contribute to preserve, conserve, and protect the natural environment.

The benefits or advantages of green HRM are for all including current as well as future generations. Green HRM has really expanded the current stakeholders' boundaries of HRM. Stakeholder engagement is a key factor in determining the performance of green HRM. According to Renwick et al.(2013), organisations do not use the full range of green HRM practices, and this may limit their effectiveness in efforts to improve environmental management. We assert that the effective performance of green HRM in terms of scope (full range of green HRM practices) and depth (intensity of green HRM practices) improve environmental performance of the organisations.

So far our review has dealt with major knowledge advancements in green HRM research. Up to this level, this review has explored about the meaning of green HRM, needs for green HRM, process model of green HRM, outcomes of green HRM and stakeholders and performance of green HRM. Now we will move to the next key area of our review, i.e. analytical and theoretical frameworks for green HRM.

9. Analytical and Theoretical Frameworks for Green HRM (GHRM)

Several theories that emerged from the organisational management and human relations domain influence the discussed themes of green HRM (meaning of green HRM, process model of green HRM, outcomes of green HRM, and stakeholders and performance of green HRM). They are institutional theory, system theory, process theory, stakeholder theory, resource based theory and ability-motivation-opportunity (AMO) theory. The researchers hope that exploring the key themes (concepts) which related to the green HRM in the light of existing as well as selected (relevant) theories will add more sensations and understanding to the field of green HRM.

This section of this paper investigates and reviews theories which are underpinning the concept of green HRM related phenomena such as meaning of green HRM, Process Model of green HRM, Outcomes of green HRM, and Stakeholders and Performance of green HRM. For this purpose, this review process has selected highly relevant and applicable organisational theories such as system theory (open system model) (Bertalanffy, 1950), institutional theory(DiMaggio & Powell, 1983; Scott, 1987), stakeholder theory (Freeman, 1984), resource based theory (Wernerfelt, 1984; Barney, 1986a & 1986b), process theory (Whitehead,1933; Russell, 1961; Mohr, 1982)and ability-motivation-opportunity (AMO) theory (Appelbaum et al., 2000) from the perspective of 'analytical HRM'. Boxall et al. (2007) consider the notion of 'analytical HRM' as an activity which has as its primary task the building of theory and the gathering of empirical data to support it. They identify three characteristics of this analytical approach to HRM.

First is concerned with the '*what and why*' of HRM ('*what and why*' of green HRM); it is about the understanding of what management tries to do with work and people in different contexts and with explaining why. For this purpose this review goes on applying institutional theory, resource based theory, and system theory.

Second is concerned with the '*how*' of HRM ('*how*' of green HRM); it is about the processes through which it is carried out. For this purpose this effort attempts to apply process theory, system theory and institutional theory.

Third is concerned with questions of '*for whom and how well*'; with assessing the outcomes of HRM, taking account of both employee and managerial interests, and laying a basis for theories of wider social consequences. For this purpose this study applies stakeholder theory and ability-motivation-opportunity (AMO) theory.

9.1 What and Why of Green HRM

In this review process we have already answered what green HRM is and why organisations need green HRM from the existing literature. However in this section, we stress that our answers come under the analytical framework of HRM. The evolved literature about the meaning of green HRM and needs for green HRM as well as outcomes of green HRM falls into the first characteristic of the analytical HRM framework developed by

Boxall et al.(2007). Therefore, analytically it has been proved that the knowledge which has been produced so far under the meaning of green HRM, needs for green HRM (why) as well as outcomes of green HRM has a strong analytical framework.

In order to indicate that, the knowledge which has been produced so far under the meaning of green HRM and needs for green HRM (why) as well as outcomes of green HRM has a strong theoretical framework, an attempt is made here to apply *institutional theory, resource based theory, and system theory*. The key question here is "why is green HRM?". The following discussion will provide adequate explanations from the perspectives of *institutional theory, resource based theory and system theory*.

Institutional Theory suggests that external pressures shape organizational action. Applied to the natural environment, most institutional studies have emphasized the effects of coercion from regulatory and social pressures and how they encourage homogeneous outcomes (e.g. Russo & Fouts, 1997). However, a criticism of institutional theory is that it often radiates organizations as passive participants that respond to institutional expectations (Perrow, 1986; Oliver, 1997). Any how this theory provides a base for why green HRM is important for an organisation.

As a theory, institutionalization fits clearly with the assumptions of the ecosystems perspective. A focus on the importance of the perceptions of those living in controlled environments, in addition to the objective conditions themselves, suggests the relevance of a social constructionist perspective as well. Ecosystems introduce the construct of goodness-of-fit, the extent to which there is a match between an individual's needs, rights, goals, and capacities and the qualities of his or her physical and social environment (Germain & Gitterman, 1995, p. 817; Greene, 1999, p. 299). If there is no fit, then initiatives are needed to ensure the good fit. One such permanent initiative is greening of HRM in an organisation. Institutionalization theory suggests that, the mismatch, or lack of goodness-of-fit between residents and their institutional environment is the primary cause of the syndrome of institutionalism. Therefore it is clear that according to the institutional theory, due to external pressures (regulatory and social pressures) green HRM is needed for every organisation nowadays. That is why this review underpins the meaning of green HRM and needs for green HRM in the light of institutional theory from the external perspective.

At the same time Resource Based Theory (RBV) suggests that resources that are specialized and non-replicable create opportunities for heterogeneity leading to competitive advantage (Wernerfelt, 1984). Business strategy or even environmental strategy therefore depends on specific organizational competencies and on a firm's ability to put them to routine productive use and maintain them over time (Wernerfelt, 1984). Applied to the environment, achieving greater level of internal environmental competency is a function of an organization's basic environmental capabilities such as pollution prevention(Hart, 1995). Sustaining these competencies depends on whether a firm continually improves its internal operations (Russo & Fouts, 1997; Sharma & Vredenburg, 1998) and invests in employee over capital (Hart, 1995). Organizations that adopt environmental strategies without these basic-level competencies are less likely to achieve their strategic goals (Christmann, 2000). That is why this review highlighted the outcomes of green HRM at employee level (employee green attitude, employee green competence and employee green behaviour) to enhance overall outcome of the organisation (organization's environmental performance). Therefore, according to the resource based view green outcomes of workforce are critical from the internal perspective. Hence, this review underpins the theme of outcomes of green HRM in the light of resource based theory from the internal perspective. Moreover, the RBV states that resources which are valuable, rare, inimitable and imperfectly substitutable are the main source of an organisation's competitive advantage (Wernerfelt, 1984; Barney, 1991; Bowman & Ambrosini, 2000; Lockett, Thompson, & Morgenstern, 2009).

A number of authors have applied the RBV to the field of strategic HRM (Wright, McMahon, & McWilliams, 1994; Wright, Dunford, & Snell, 2001) but not in the field of green HRM. The authors who applied in strategic HRM suggest that the knowledge, skills and activities of the workforce are core resources that contribute to the firm's competitive advantage. Similarly we argue that green attitude, green knowledge, green skills, and green behaviour of employees are main resources that contribute to the organization's environmental performance.

The importance of green HRM in achieving environmental performance of an organisation has potential to receive considerable attention in the RBV literature. According to Penrose (1959) and Lockett et al. (2009), the value creation from the use of resources depends on the way that these resources are developed and deployed within the organisations. Therefore, in the green HRM context, the green attitude, green knowledge, green skills, and green behaviour of employee are needed in order to create environmental value from other resources.

In this context, the green HRM functions are more essential in order to maximize green outcomes of HRM

created through the effective development and deployment of people within the organisation. Indeed, we argue that the level of greening of HRM functions will determine the level of employee contribution and organization's environmental performance.

From the perspective of green HRM literature, we argued that all HRM functions have the potential to become as green HRM functions and to produce environmentally friendly workforce and green organisational capabilities which are critical to achieving environmental performance of an organization (Arulrajah, Opatha, & Nawaratne, 2015). In the sense that it can have an impact on the environmental performance of the organisation, we can also treat the green HRM functions themselves as resources.

The framework of this review applies the System Theory (open system model) and also adds a new insight from the perspective of green HRM. Katz and Kahn (1978) apply the concept of open system to the organization. The organization is seen as a system built by energetic input-output where the energy coming from the output reactivates the system. A traditional theoretical approach corresponding to this study conceptualization roots on the general system theory that likens organizations to biological organisms (Katz & Kahn, 1978).

Within the framework of system theory, human resource management can be viewed as a subsystem that exchanges information and energy with the environment to attract, develop, motivate, and retain employees who ensure the effective functioning and survival of the organization (Jackson & Schuler, 1995). Serving these purposes, green HRM related policies and practices can be used as tools to strengthen outcomes of green HRM and ultimately lead to organization's environmental performance. Furthermore, human resource management is required to serve the organization's strategic goal in terms of maintaining a good personnel structure, achieving optimal skill and knowledge combinations, and keeping labor costs acceptable. On this front, green HRM related human resource policies and practices can be used to improve the corporate environmental image and performance.

HR managers should become familiar with the concept of systems and the integrated way of thinking. All managers have to plan structural adjustments to guarantee the survival of the whole system, constantly formulating new interpretations of the business scenarios in order to find an adequate positioning, implementing (when necessary) periods of adjustment, transformation and redefinition of the organizational structure. This adaptive and proactive behavior should be based upon systems theory conceptual pillars in order to promote sustainable and long-lasting performance. Given real-world complexity, we strongly believe and argue that systems perspective can effectively contribute to green HRM.

It is possible to mention here that the above discussion provides adequate explanations from the perspectives of three theories (institutional theory, resource based theory and system theory) in respect of "What and why of green HRM".

9.2 How of Green HRM

The second concern is about the 'how' of HRM ('how' of green HRM); it is about the processes through which it is carried out. In our review we have already answered how of green HRM from the existing literature. However in this section, we need to emphasize, that the evolved literature about the how of green HRM falls into the second characteristic of the analytical HRM framework developed by Boxall et al.(2007). Therefore, analytically it is confirmed that the knowledge which has been produced so far under the process or functional models of green HRM possesses a strong analytical framework.

For the purpose of indicating that, the knowledge produced so far under the process or functional models of green HRM (how) possesses a strong theoretical framework, process theory, system theory and institutional theory are applied in this review.

Process theory is a commonly used form of scientific research study in which events or occurrences are said to be the result of certain input states leading to a certain outcome (output) state, following a set process. Process theory seeks to explain by identifying sequences of actions that lead to outcomes if specific antecedent conditions are fulfilled (Whitehead, 1933; Russell, 1961; Mohr, 1982). In management research, process theory provides an explanation for 'how' something happens.

According to Maxwell, "Process theory deals with events and the processes that connect them; it is based on an analysis of the causal processes by which some events influence others" (2004, p. 5). A process approach requires a process-oriented conception of causal explanation, what Maxwell (2004) calls a realist causal approach, and Cook (2002) refers to as explanatory theories of cause. Maxwell asserts that (among other things): "A realistic, process-oriented approach to explanation, recognizes the explanatory importance of context of the phenomena studied, and relies fundamentally on an understanding of the processes by which an event or

situation occurs, rather than simply a comparison of situations involving the presence or absence of the presumed cause” (pp. 8-9).

Therefore, this theory provides the answer for how of green HRM. It will happen through the greening of functional dimensions of HRM (green HRM functions). For this purpose the **system theory** too supports this review. It is owing to the reason that this theory also explains how something can be materialized through taking inputs, processing and giving outputs.

According to the institutional theory, the process of institutionalization will not happen in a vacuum. Institutionalizing green HRM practices through the functional dimension of HRM has to be taken place within the organisation. For this, the process of institutionalization of green HRM needs basically two steps: (1) legitimization (normative, cognitive and coercive/legal or law aspect) at organisational level, and (2) institutionalizing of green aspects into HRM functions (formalizing). The conceptual model of this review at functional or process level is dealing with the second step in the above two steps. Therefore, these three theories (process theory, system theory and institutional theory) strengthen the themes which we discussed in this review and provide the answer for how of green HRM.

9.3 For Whom and How Well: Green HRM

The third concern is about the questions of *‘for whom and how well’*: with assessing the outcomes of HRM, taking account of both employee and managerial interests, and laying a basis for theories of wider social consequences. For this purpose stakeholder theory and ability-motivation-opportunity (AMO) theory are applied here.

The *‘for whom and how well’* of green HRM has already been approached in our review from the little literature which is available to us. The evolved little literature about the stakeholders and performance of green HRM falls into the third characteristic of the analytical HRM framework developed by Boxall et al.(2007). Therefore, the observation that the little knowledge produced so far under the stakeholders and performance of green HRM have necessitated a need for an adequate analytical framework in this research area. For this purpose stakeholder theory and ability-motivation-opportunity theory are used in this review.

To provide an answer for, *‘for whom green HRM’* can be supported in the light of **stakeholder theory**. It is because of the fact that green HRM is for all. It covers all the stakeholders (direct, indirect, internal, external, current as well as future) of the organisation. Jackson and Schuler (2003) stated that *‘the principle that effective management requires attending to all relevant stakeholders is as true for managing human resources as for other management tasks. Human resource management practices cannot be designed solely to meet the concerns of the employees. Nor can they be designed by considering only their consequences for the bottom line. Organizations that are the most effective in managing people develop HR systems that meet the needs of all key stakeholders’*. The above argument appears to be consistent with the current debate on sustainability, most commonly expressed in terms of *‘the triple bottom line’* of environmental, social and economic goals. Green HRM is for that and it must definitely meet the needs of all stakeholders. Therefore, the *‘for whom’* analysis of green HRM can be approached theoretically based on stakeholder theory.

The last aspect is about how well. The answer for this can be constructed in the light of AMO theory. It is due to the reason that how well of green HRM is dependent upon ability, motivation and opportunities in any level. It may be at individual employee/workforce level, team level, department level or at organisational level (organization’s environmental performance). While employees must have green ability to perform in green way they must have an internal state that leads to a higher degree of willingness to exert the needed effort to perform the job in green way or environment-friendly way. Also opportunities to perform in green way have to be provided to employees by their superiors and employer. As far as motivation is concerned, it is an internal state of an employee giving the meaning that it is an employee’s enthusiasm to do something seriously because he or she likes and enjoys by doing it or he or she thinks it is very important (Opatha, 2015). Hence, the employee is supposed to like *‘greening’* and enjoys by doing *‘greening’* or he or she thinks that *‘greening’* is very important. Also motivation is an activity performed by one person to stimulate another to perform successfully a duty or duties of the job to accomplish relevant established objectives (Opatha, 2015). Hence, relevant top managers of the organization should develop programmes to stimulate their subordinates to perform green duties to accomplish objectives relating to *‘greening’*. Thus, the ultimate performance of green HRM can be under the scope of AMO theory.

Next section of our review is to map the green HRM literature with the analytical and theoretical frameworks which we discussed in this section.

10. Mapping Green HRM Literature with the Analytical and Theoretical Frameworks

In order to provide strong analytical and theoretical frameworks to underpin the valuable knowledge obtained by the scholars through systematic research works in this field, mapping green HRM themes with the relevant analytical and theoretical frameworks is a key task of this review process. Table 2 illustrates how the above discussed green HRM related themes are mapped with the frameworks of analysis and theories.

Table 2. Analytical Perspective of Green HRM and Corresponding Theories

Analytical HRM/Green HRM Perspective	Corresponding Theories
What and why of green HRM	
<ul style="list-style-type: none"> ▪ <i>Meaning of green HRM</i> ▪ <i>Needs for green HRM</i> ▪ <i>Outcomes of green HRM</i> 	Institutional Theory Resource Based Theory System Theory
How of green HRM	
<ul style="list-style-type: none"> ▪ <i>Process Model of green HRM</i> 	Process Theory System Theory Institutional theory
For whom and how well: green HRM	
<ul style="list-style-type: none"> ▪ <i>Stakeholders and Performance of green HRM</i> ▪ <i>Outcomes of green HRM</i> 	Stakeholder Theory AMO Theory

11. Discussion

This paper is an intellectual initiation which has qualitatively substantiated that the existing literature and research works on green HRM have strong analytical and theoretical frameworks. In this review, an appropriate attempt was made to apply the relevant and suitable theories by aligning with the analytical perspective of HRM presented by Boxall et al. (2007) in order to highlight the intellectual nature of green HRM.

This review process has began with introduction which briefly highlighted the current position of existing body of green HRM knowledge and followed with methodology. Under the overview of green HRM, five main themes of green HRM were addressed. They include meaning of green HRM, needs for green HRM, process model of green HRM, outcomes of green HRM and stakeholders and performance of green HRM. In general, green HRM has several micro and macro level aspects. However, it is not possible to explain everything in a comprehensive manner here. Therefore, we have chosen above themes for our discussion in order to fulfill the indented objective of our review.

Subsequently, we introduced the analytical and theoretical frameworks for green human resource management (GHRM) in this review. The analytical HRM provides us a 3-mode of analysis which is a really useful framework not only to organize the existing knowledge of green HRM, but also to provide an analytical framework to underpin the valuable knowledge obtained by the scholars through systematic research works in this field. Similarly, the selected organisational theories were also provided as the required inputs to establish a theoretical framework for green HRM research works. Finally, this review has systematically and logically mapped summarized knowledge of green HRM with the discussed frameworks of analysis and theories. Through this mechanism, ultimately this review establishes a link between existing literature in green HRM and organizational theories.

12. Conclusion

Based on our review, we can conclude that the emerging body of knowledge in green HRM has strong analytical and theoretical frameworks. Even though its knowledge creation progress just appeared as less theoretical or a theoretically weak journey, but reality is not so. As a notable example, it is possible to indicate the scholarly work of Renwick et al. in 2013, which categorized the existing green HRM literature on the basis of Ability-Motivation-Opportunity (AMO) theory. They laid a foundation to such initiations in green HRM. Many scholars in this research field tend to be involved in integrating Human Resource Management with Corporate Environmental Management while forgetting or perhaps ignoring to internalize, explore and document the analytical and theoretical frameworks for such integration. However, this review can be considered as a logical effort that provides a contribution to a certain extent in establishing strong analytical and theoretical underpinning to the valuable knowledge obtained by the scholars through systematic research works in the newly emerged field of green HRM.

References

- Anthony, S. (1993). Environmental Training Needs Analysis. *Training Officer*, 29(9), 273.
- Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. (2000). *Manufacturing advantage: why high-performance work systems pay off*. Ithaca: Cornell University Press.

- Arulrajah, A. A., Opatha, H. H. D. N. P., & Nawaratne, N. N. J. (2015). Green Human Resource Management Practices: A Review. *Sri Lankan Journal of Human Resource Management*, 5(1), 1-16. <https://doi.org/10.4038/sljhrm.v5i1.5624>
- Barney, J. B. (1986a). Strategic Factor Markets: Expectations, Luck and Business Strategy. *Management Science*, 32(10), 1231-1241. <http://dx.doi.org/10.1287/mnsc.32.10.1231>
- Barney, J. B. (1986b). Organizational Culture: Can it be a Source of Sustained Competitive Advantage? *Academy of Management Review*, 11(3), 656-665. <http://dx.doi.org/10.5465/AMR.1986.4306261>
- Barney, J. B. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120. <http://dx.doi.org/10.1177/014920639101700108>
- Barrett, S. M., & Murphy, D. F. (1996). Managing Corporate Environmental Policy: A Process of Complex Change. In W. Wehrmeyer (Eds.), *Greening People Human Resources and Environmental Management* (pp. 75-98). University of Kent, Canterbury, Kent, England. https://doi.org/10.9774/gleaf.978-1-909493-00-1_5
- Berry, M. A., & Rondinelli, D. A. (1998). Proactive Corporate Environmental Management: A New Industrial Revolution. *Academic Management Executive*, 12(2), 38-50. <http://dx.doi.org/10.5465/AME.1998.650515>
- Bertalanffy, V. L. (1950). The Theory of Open Systems in Physics and Biology. *Science*, 111, 23-29. <https://doi.org/10.1126/science.111.2872.23>
- Bird, A. (1996). Training for Environmental Improvement. In W. Wehrmeyer (Eds.), *Greening People Human Resources and Environmental Management* (pp. 227-246). University of Kent, Canterbury, Kent, England. https://doi.org/10.9774/gleaf.978-1-909493-00-1_13
- Bowman, C., & Ambrosini, V. (2000). Value Creation Versus Value Capture: Towards a Coherent Definition of Value in Strategy. *British Journal of Management*, 11(1), 1-15. <http://dx.doi.org/10.1111/1467-8551.00147>
- Boxall, P., Purcell, J., & Wright, P. (2007). Human Resource Management: Scope, Analysis, and Significance. In P. Boxall, J. Purcell, & P. Wright (Eds.), *The Oxford Handbook of Human Resource Management* (pp. 1-16). New York: Oxford University Press.
- Brio, J. A. D., Fernandez, E., & Junquera, B. (2007). Management and Employee Involvement in Achieving an Environmental Action-based Competitive Advantage: An Empirical Study. *The International Journal of Human Resource Management*, 18(4), 491-522. <http://dx.doi.org/10.1080/09585190601178687>
- Christmann, P. (2000). Effects of 'Best Practices' of Environmental Management on Cost Competitiveness: The Role of Complementary Assets. *Academy of Management Journal*, 43(4), 663-680. <http://dx.doi.org/10.2307/1556360>
- Cook, T. D. (2002). Randomized Experiments in Educational Policy Research: A Critical Examination of the Reasons the Educational Evaluation Community has offered for not Doing them. *Educational Evaluation and Policy Analysis*, 24(3), 175-199. <http://dx.doi.org/10.3102/01623737024003175>
- Daily, B. F., & Huang, S. (2001). Achieving Sustainability through Attention to Human Resource Factors in Environmental Management. *International Journal of Operation and Production Management*, 21(12), 1539-1552. <http://dx.doi.org/10.1108/01443570110410892>
- Daily, B. F., Bishop, J. W., & Steiner, R. (2007). The Mediating Role of EMS Teamwork as it Pertains to HR Factors and Perceived Environmental Performance. *Journal of Applied Business Research*, 23(1), 95-110. <http://dx.doi.org/10.19030/jabr.v23i1.1411>
- DiMaggio, P. J. (1983). State Expansion and the Structuration of Organizational Fields. In R. Hall & R. Quinn (Eds.), *Organizational Theory and Public Policy*. Beverly Hills: Sage.
- Fernandez, E., Junquera, B., & Ordiz, M. (2003). Organizational Culture and Human Resources in the Environmental Issue. *The International Journal of Human Resource Management*, 14(4), 634-656. <http://dx.doi.org/10.1080/0958519032000057628>
- Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Pittman, MA: Marshfield.
- Germain, C., & Gitterman, A. (1995). Ecological Perspective. In R.L. Edwards et al., (Eds.), *Encyclopedia of Social Work*, (19th ed., Vol. 1, pp. 816-824). Washington, D.C: NASW Press.
- Govindarajulu, N., & Daily, B. F. (2004). Motivating Employees for Environmental Improvement. *Industrial Management & Data Systems*, 104(4), 364-372. <http://dx.doi.org/10.1108/02635570410530775>
- Greene, R. R. (1999). Ecological Perspectives: An Eclectic Theoretical Framework for Social Work Practice. In R. R. Greene (Eds.), *Human Behavior Theory and Social Work Practice* (2nd ed., pp. 259-300). New York:

Aldine de Gruyter.

- Hart, S. L. (1995). A Natural- Resource-Based View of the Firm. *Academy of Management Review*, 20(4), 986-1014. [http:// dx.doi.org/10.5465/AMR.1995.9512280033](http://dx.doi.org/10.5465/AMR.1995.9512280033)
- Jabbour, C. J. C., Santos, F. C. A., & Nagano, M. S. (2008). Environmental Management System and Human Resource Practices: Is there a Link between them in four Brazilian companies? *Journal of Cleaner Production* 16(17), 1922-1925. <http://dx.doi.org/10.1016/j.jclepro.2008.02.004>
- Jabbour, C. J. C., & Santos, F. C. A. (2008). The Central Role of Human Resource Management in the Search for Sustainable Organizations. *International Journal of Human Resource Management*, 19(12), 2133-2154. <http://dx.doi.org/10.1080/09585190802479389>
- Jabbour, C. J. C., Santos, F. C. A., & Nagano, M. S. (2010). Contribution of HRM Throughout the Stages of Environmental Management: Methodological Triangulation Applied to Companies in Brazil. *International Journal of Human Resource Management*, 21(7), 1049-1089. <http://dx.doi.org/10.1080/09585191003783512>
- Jabbour, C. J. C. (2011). How Green are HRM practices, Organizational Culture, Learning and Teamwork? A Brazilian Study. *Industrial and Commercial Training*, 43(2), 98-105. <http://dx.doi.org/10.1108/00197851111108926>
- Jackson, S. E., Renwick, D. W. S., Jabbour, C. J. C., & Camen, M. M. (2011). State-of-the-Art and Future Directions for Green Human Resource Management: Introduction to the Special Issue. *German Journal of Research in Human Resource Management*, 25(2), 99-116. <http://dx.doi.org/10.1177/239700221102500203>
- Jackson, S. E., & Schuler, R. S. (1995). Understanding Human Resource Management in the Context of Organizations and their Environments. *Annual Review of Psychology*, 46, 237-264. <http://dx.doi.org/10.1146/annurev.ps.46.020195.001321>
- Jackson, S. E., & Schuler, R. S. (2003). *Managing Human Resources through Strategic Partnerships* (8thed.), Cincinnati, OH: South-Western.
- Katz, D., & Kahn, R. L. (1978). *The Social Psychology of Organizations*, (2nd ed), New York, NY: John Wiley and Sons.
- Lockett, A., Thompson, S., & Morgenstern, U. (2009). The Development of the Resource-based View: A Critical Appraisal. *International Journal of Management Reviews*, 11(1), 9-28. <http://dx.doi.org/10.1111/j.1468-2370.2008.00252.x>
- Maxwell, J. A. (2004). Causal Explanation, Qualitative Research, and Scientific Inquiry in Education. *Educational Researcher*. 33(2), 3-11. <http://dx.doi.org/10.3102/0013189X033002003>
- Milliman, J., & Clair, J. (1996). Best Environmental HRM Practices in the US. In W. Wehrmeyer (Eds.). *Greening People Human Resources and Environmental Management* (pp.49-73). University of Kent, Canterbury, Kent, England. https://doi.org/10.9774/gleaf.978-1-909493-00-1_4
- Mohr, L. B. (1982). *Explaining Organizational Behavior*. Jossey-Bass, San Francisco.
- Muster, V., & Schrader, U. (2011). Green Work-Life Balance: A New Perspective for Green HRM. *German Journal of Research in Human Resource Management*, 25(2), 140-156. http://dx.doi.org/10.1688/1862-0000_ZfP_2011_02_Muster
- Neto, A. S., & Jabbour, C. J. C. (2010). Guidelines for Improving the Adoption of Cleaner Production in Companies through Attention to Nontechnical Factors: A Literature Review. *African Journal of Business Management*, 4(19), 4217-4229. <http://dx.doi.org/10.5897/AJBM20102C15F7818236>
- Oliver, C. (1997). Sustainable Competitive Advantage: Combining Institutional and Resource-Based Views. *Strategic Management Journal*, 18(9), 679-713. [http://dx.doi.org/10.1002/\(SICI\)1097-0266\(199710\)18:9<697::AID-SMJ909>3.0.CO;2-C](http://dx.doi.org/10.1002/(SICI)1097-0266(199710)18:9<697::AID-SMJ909>3.0.CO;2-C)
- Opatha, H. H. D. N. P., & Arulrajah, A. A. (2014). Green Human Resource Management: Simplified General Reflections. *International Business Research*, 7(8), 101-112. <http://dx.doi.org/10.5539/ibr.v7n8p101>
- Opatha, H. H. D. N. P. (2009). *Human Resource Management, Personnel*. Author Publication, Nugegoda, Colombo: Sri Lanka.
- Opatha, H. H. D. N. P. (2015). *Organizational Behaviour, The Human Side of Work*. Author Publication, Nugegoda, Colombo: Sri Lanka.

- Penrose, E. T. (1959). *The Theory of Growth of the Firm*. Oxford: Blackwell.
- Perrow, C. (1986). *Complex Organizations: A Critical Essay*. New York: Random House.
- Phillips, L. (2007). *Go Green to Gain the Edge over Rivals*. *People Management*, 23rd August, 9.
- Ramus, C. A. (2001). Organizing Support for Employees: Encouraging Creative Ideas for Environmental Sustainability. *California Management Review*, 43(3), 85-103. <http://dx.doi.org/10.2307/41166090>
- Ramus, C. A. (2002). Encouraging Innovative Environmental Actions: What Companies and Managers Must Do. *Journal of World Business*, 37, 151-164. [https://doi.org/10.1016/S1090-9516\(02\)00074-3](https://doi.org/10.1016/S1090-9516(02)00074-3)
- Ramus, C. A., & Steger, U. (2000). The Roles of Supervisory Support Behaviours and Environmental Policy in Employee 'Ecoinitiatives' at Leading-edge European Companies. *Academy of Management Journal*, 43(4), 605-626. <http://dx.doi.org/10.2307/1556357>
- Renwick, D. W. S., Redman, T., & Maguire, S. (2013). Green Human Resource Management: A Review and Research Agenda. *International Journal of Management Review*, 15(1), 1-14. <http://dx.doi.org/10.1111/j.1468-2370.2011.00328.x>
- Renwick, D., Redman, T., & Maguire, S. (2008). *Green HRM: A Review, Process Model, and Research Agenda*. University of Sheffield Working Paper. Retrieved from <http://www.sheffield.ac.uk/content/1/c6/08/70/89/2008-01.pdf>
- Rothenberg, S. (2003). Knowledge Content and Worker Participation in Environmental Management at NUMMI. *Journal of Management Studies*, 40(7), 1783-1802. <http://dx.doi.org/10.1111/1467-6486.00400>
- Russell, B. (1961). *The History of Western Philosophy*. London: Routledge.
- Russo, M. V., & Fouts, P. A. (1997). A Resource Based Perspective on Corporate Environmental Performance and Profitability. *Academy of Management Journal*, 40(3), 534-559. <http://dx.doi.org/10.2307/257052>
- Scott, W. R. (1987). The Adolescence of Institutional Theory. *Administrative Science Quarterly*, 32(4), 493-511. <http://dx.doi.org/10.2307/2392880>
- Sharma, S., & Vredenburg, H. (1998). Proactive Corporate Environmental Strategy and the Development of Competitively Valuable Organizational Capabilities. *Strategic Management Journal*, 19(8), 729-753. [http://dx.doi.org/10.1002/\(SICI\)1097-0266\(199808\)19:8<729::AID-SMJ967>3.0.CO;2-4](http://dx.doi.org/10.1002/(SICI)1097-0266(199808)19:8<729::AID-SMJ967>3.0.CO;2-4)
- Shrivastava, P. (1994). CASTRATED Environment: GREENING Organizational Studies. *Organization Studies*, 15(5), 705-726. <http://dx.doi.org/10.1177/017084069401500504>
- Shrivastava, P. (1995). The Role of Corporations in Achieving Ecological Sustainability. *Academy of Management Review*, 20(4), 936-960. <http://dx.doi.org/10.5465/AMR.1995.9512280026>
- Stringer, L. (2009). *The Green Workplace. Sustainable Strategies that Benefit Employees, the Environment, and the Bottom Line*. New York: Palgrave Macmillan.
- Wehrmeyer, W. (Eds). (1996). *Greening People: Human Resources and Environmental Management*. Greenleaf Publishing, Sheffield: England.
- Wernerfelt, B. (1984). A Resource-based View of the Firm. *Strategic Management Journal*, 5(2), 171-180. <http://dx.doi.org/10.1002/smj.4250050207>
- Whitehead, A. N. (1933). *Adventures of Ideas*. New York: The Free Press.
- Wolters, T., Bouman, M., & Peeters, M. (1995). Environmental Management and Employment: Pollution Prevention Requires Significant Employee Participation. *Greener Management International*, 11, 63-72.
- Wright, P. M., Dunford, B. B., & Snell, S. A. (2001). Human Resources and the Resource Based View of the Firm. *Journal of Management*, 27(6), 701-721. <http://dx.doi.org/10.1177/014920630102700607>
- Wright, P. M., McMahon, G. C., & McWilliams, A. (1994). Human Resources and Sustained Competitive Advantage: a Resource Based Perspective. *International Journal of Human Resource Management*, 5(2), 301-326. <http://dx.doi.org/10.1080/09585199400000020>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).